/ <u>X</u> /	New			
//	Renewal		Permit No. 77-	351
	Modified			
′—′	1100311200			
	·	Harper's Chaparr	rel Estates management of Facility)	
		·	•	
	This	permit hereby auth	orizes the applican	nt:
		Harper	Willard	F
	·	(Last) c/o Plains Er	(First)	(Middle)
		P. O. Box 727	7	
			(Street or P.O.	Box)
		Newcastle		Wyoming 82701
		(City)	(County)	(State)
facili	ity located :	in Section 6, T49N	N, R67W (Legal Description	n)
•1	- 0	Crook	and the second second	in the State of
in the	e County of			•
√yomir	ng. This per	rmit shall be effec	tive for a period	of <u>2</u> years
from t	the date of :	issuance of this ρε	ermit not to exceed	five (5) years.
			Authorized by:	• • • • • • • • • • • • • • • • • • • •
را	Que Adminis	) Oalo D	Labers 6	Sundin Director
	Water Quality		Wyoming Dept. o	f Envíronmental Qualit
	_			
	ווארנותרו 14	1070		the second secon

January 16, 1978

Date of Issuance
cc: Sheridan District Sanitarian

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION
State Office Building
Cheyenne, Wyoming 82002

PROJECT: Chapparrel Estates

ARCHITECT OR ENGINEER: Plains Engineering

P. O. Box 727, Newcastle, Wyoming 82701

WATER QUALITY DIVISION REFERENCE NUMBER: 77-351

REVIEWING ENGINEER: Tom Mueller, William L. Garland, P.E.

DATE OF REVIEW: January 6, 1978

ACTION: NOT AUTHORIZED FOR CONSTRUCTION. See comments.

COMMENTS: PVC water pipe with SDR of 26 is unacceptable. PVC water pipe must adhere to the requirements of AWWA C-900. All other items of the

plans and specifications appear acceptable.

/ <u>X</u> /	New			
//	Renewal		Permit No	77-353
//	Modified			
		Harney Reservoir	, Rosebud Mine	·
		(Namo	e of Facility)	
	This	permit hereby au	thorizes the appli	cant:
		Rosebud Coal S	ales Company	
		(Last) Attention: Je P.O. Box 780	(First) rry Ellis	(Middle)
			(Street or P.	0. Box)
		Hanna	Carbon	Wyoming 82327
		(City)	(County)	(State)
	struct, ins	Soution 16	Runoff and Sedim	entation Pond
TACTIT			(Legal Descript	ion)
in the	County of	Carbon		_, in the State of
Wyomin	ng. This pe	rmit shall be effe	ective for a perio	d of3years
from t	he date of :	issuance of this p	permit not to exce	ed five (5) years.
			Authorized by	:
الم	Quainis	Jalane	Lobers	E Sundin Director
V	Vater Quality		Wyoming Dept.	of Environmental Quality
	October	12, 1977		
	Date	of Issuance		·

/ <u>X</u> /	New	1 .	* . · ·		
//	Renewal		Permit No	77-352	
//	Modified				
		Antelope Reservoi	r, Rosebud Mine	·	
		(Name c	f Facility)		
	This	permit hereby author	rizes the appli	cant:	
•	÷				
		Rosebud Coal Sale	s Company		
		(Last) Attention: Jerry P.O. Box 780	(First) Ellis	(Middl	<u>=</u> )
•			(Street or P.	D. Box)	<del>, , , , , , , , , , , , , , , , , , , </del>
		Hanna	Carbon	Wyoming	82327
		(City)	(County)	(State)	
to con	struct, inst	all, or modify a $_{-}^{-}$	Runoff and Sedim	entation Pond	
		0 11 77 700		the second secon	
Iacili	ty located i	<del></del>	(Legal Descript:	ion)	
in the	County of _	Carbon		_, in the State	e of
Wyoming	g. This per	mit shall be effect	ive for a period	l of <u>,</u> 2	years
from t	he date of i	ssuance of this per	mit not to excee	ed five (5) yea	ırs.
				·	
					•
			Authorized by:		
<u> </u>	Diam &	Jula I	Esbern	Elina	in
Wa	Administ ater Quality	1 1	Wyoming Dept.	Director of Environment	al Quality
	October	12. 1977			
		of Issuance			

/ <u>X</u> /	New	*		
//	Renewal	•	Permit No	77-354
//	Modified			
		Lepus Reservoir,	Rosebud Mine	
		(Name	of Facility)	
	This	permit hereby aut	horizes the applic	ant:
		D       0   1   0		
		Rosebud Coal:Sa	·	
		(Last) Attention: Jer P.O. Box 780	(First) ry Ellis	(Middle)
			(Street or P.O	. Box)
		Hanna	Carbon	Wyoming 82327
		(City)	(County)	(State)
	struct, inst	Soction 31 T	Runoff and Sedimer	itation Pond
zaczzz.	·		(Legal Description	on)
in the	County of _	Carbon		, in the State of
Wyomin	g. This per	rmit shall be effe	ctive for a period	of 5 years
from th	he date of i	issuance of this p	ermit not to exceed	l five (5) years.
			Authorized by:	
لأنا	lian J.	Jala 2	Robert	E. Sundin
Wa	Administ ater Quality	1 1	Wyoming Dept. o	Director of Environmental Quality
	Octobe	r 12, 1977		
	TD - 1	C T		

/ <u>x</u> /	New	i .		
//	Renewal	•	Permit No. 77	7-355
//	Modified			
		Pine Draw Reservoir	, Rosebud Mine	
	<del></del>		of Facility)	
	This	permit hereby auth	orizes the applica	ant:
	,			·
		Rosebud Coal Sal	es Company	,
		(Last) Attention: Jerr P.O. Box 780	(First)	(Middle)
			(Street or P.O.	Box)
		Hanna	Carbon	Wyoming 82327
		(City)	(County)	(State)
		tall, or modify a _ in Section 21, T		tation Pond
racili	ty located :	in section 21, 1	(Legal Description	nn)
in the	County of	Carbon		in the State of
Wyomin	g. This per	rmit shall be effec	tive for a period	of <u>5</u> years
_	_	issuance of this pe		
		:		1
			Authorized by:	
( Q ).	00. <u>.</u>	(Valla D	Robert	E Sernetin
T.	Adminis Ater Quality		Wyoming Bent (	Director of Environmental Quality
	acer quarre	, 2111011	wyomang bept.	
	Ootobor	12 1077		
·		12, 1977		
	Date	of Issuance		

/ <u>X</u> /	New	ı		
//	Renewal		Permit No. 77	-356
//	Modified			
	· · ·	Rosebud Reservoir, I		
		. (Name of	Facility)	
	This	permit hereby author	rizes the applica	nt:
		Rosebud Coal Sa	ales Company	
		(Last) Attention: Jer	(First)	(Middle)
			(Street or P.O.	Box)
		Hanna	Carbon	Wyoming 82327
		(City)	(County)	(State)
				e en
to con	struct, ins	tall, or modify a Ru	noff and Sediment	tation Pond
facili	ty located :			
		(	(Legal Descriptio	n)
in the	County of _	Carbon		in the State of
Wyomin	g. This per	rmit shall be effecti	ive for a period	of3 years
from t	he date of :	issuance of this perm	nit not to exceed	five (5) years.
			Authorized by:	
<u>.</u>	liam Q.(	Jala 2	Lover	E. Sundin
W	Administater Quality			Director f Environmental Quality
	October	12 <b>,</b> 1977		
-	Data	of Tecuance		

$\overline{X}$ New		· · · · ·	
// Renewal		Permit No. 57	7-357 🖣
// Modified			
Energy	Technical Center	Sewer Extension	s <b>7</b>
· ·		Facility)	
This perm	it hereby author	izes the applica	at:
En	ergy Technical C	enter	
c/	(Last) o Moores - Eiken 15 So. Tamarac,		(Middle)
		(Street or P.O.	Box)
De	nver		Colorado 80237
	(City)	(County)	(State)
to construct, install,	or modify a	Sewer Extensions	
facility located in So	ection 27 & 34,	T50N, R72W	
· · · · · · · · · · · · · · · · · · ·	(	Legal Description	n)
in the County of	ampbell		in the State of
Wyoming. This permit	shall be effecti	ve for a period	of 2 years
from the date of issuar	ace of this perm	it not to exceed	five (5) years.
		. •	
		Authorized by:	
1000 P. Jan Administrator	20-2	Robert	E. Sundi
Water Quality Div		Wyoming Dept. o	f Environmental Quality
-			
September	14, 1977		
cc: Nelson, Patey of Pat Greeley, CO 8063	terson and Quir	 k, Inc., 2021 Clu	ubhouse Drive,

/ <u>X</u> /	New			
//	Renewal		77 Permit No.	–358 –––––––––––––––––––––––––––––––––––
<i>/</i> <sup>-</sup> /	Modified			
_				
		McConaughy Small i	Waste Treatment Fac	ility
			of Facility)	
•	This	permit hereby aut	horizes the applica	int:
		McConaughy	Robert	Е.
		(Last)	(First)	(Middle)
		P.O. Box 518		
			(Street or P.O.	
		Wilson	Teton	Wyoming 83014 (State)
		(City)	(County)	(State)
to cor	struct. inst	all, or modify a	Small Waste Trea	tment
		Section 14,	T41N. R117W	
Iacili	ty located i	-n	(Legal Description	n)
in the	County of	Teton		in the State of
Wyomin	ıg. This per	mit shall be effe	ctive for a period	of 2 years
			ermit not to exceed	,
TIOM C	ine date of 1		CIMIL NOC TO CHOOSE	, 1 <b>2.0</b> (0) years
-				
•			Authorized by:	
لأ	Deam (	Jula D	Robert	E. Sundin Director
W	Vater Quality	1 1	Wyoming Dept. c	f Environmental Quality
	•	•		
	Septemb	er 14, 1977		•
	Date	of Issuance	<del></del>	

cc: Peter M. Jorgensen, P.O. Box 1142, Jackson, WY 83001

/ <del>X</del> -/	New	en e	÷	
·	Renewal	.,	Permit No.	77-359
· <u> </u>	Modified			
<i>'</i> /	HOUITIEU			
		AV Comp. M	Johija Hama Davik	
	· 		Mobile Home Park e of Facility)	
	The c	·	• •	aant.
	IIIIS	permit hereby ad	thorizes the appli	cant:
		V a mara tila	Dakast	
		Kenrath (Last)	Robert (First)	F. (Middle)
		General Del		(
		- deficial Del	(Street or P.	0. Box)
		Walcott		Wyoming 82335
		(City)	(County)	(State)
				•
to cor	nstruct, inst	all, or modify a	Complete Water	and Wastewater System
facili	ity located i	Section 35,		
	•		(Legal Descript	ion)
in the	e County of _	Carbon		_, in the State of
Wyomir	ng. This per	rmit shall be eff	ective for a perio	d of 2 years
			permit not to exce	
			Authorized by	<b>:</b>
_ ال	Dian P.C	Jackson	Hober	a & Sundin
t	Administ Water Quality		Wyoming Dept.	Director of Environmental Quality
·			,	
	Sentem	ber 15; 1977		
			<del></del>	•

cc: Rob Roy Logan, of Issuance Phillip Hughes, Sanitarian



## Department of Environmental Quality Water Quality Division

HATHAWAY BUILDING

CHEYENNE, WYOMING 82002

TELEPHONE 307 777-7781

September 15, 1977

Honorable Clifford Stickney Mayor, Town of Pavillion P.O. Box 15 Pavillion, Wyoming 82523

Dear Mayor Stickney:



We appreciate your efforts to submit us "As Built" information of Well #3.

Our "Wyoming Water Quality Rules and Regulations, 1976, Chapter III" require all plans and specifications to have the signature or seal of an engineer registered in the State of Wyoming. In addition the following items need to be addressed:

- 1) Please submit capping details, and surface grouting details.
- 2) A vent is needed for the well casing. Lack of a vent tends to cause leaks around the casing seal.
- 3) A means of measuring water depth is highly desirable.
- 4) An air release-vacuum relief valve should be considered. The U-shaped discharge pipe tends to accumulate air at its high point.

We will review the resubmissions. You will be expected to finish construction of your well if necessary to meet our minimum design standards. However, this construction cannot proceed until authorization is received from this Department.

If any question comes up, please feel free to contact us.

Sincerely, DarfWAid

David W. Hill

Environmental Engineer Water Quality Division

DWH/.jo

Enclosure - Ten State Water Standards

/ <u>X</u> /	New	;		•	
//	Renewal		Permit No	77-360R	
<u>/</u> /	Modified		•		
		Town of Pavil	lion - Well #3		
			of Facility)		
	This p	permit hereby auth	horizes the appli	icant:	
		Ž			
		Town of Pavil	lion		
		(Last) c/o Orren J, 801 So. 2nd S	(First) Bower, P.E.	(Middle)	
	-	001 00; 2114 0	(Street or P	.0. Box)	
	•	Lander	Fremont	Wyoming 82520	
		(City)	(County)	(State)	
facili	ty located in	n NW뉳, SE뉳 of Se	ction 7, T3N, R2 (Legal Descript	E tíon)	
in the	County of	Fremont		, in the State of	
Wyomin	g. This perm	nit shall be effec	ctive for a perio	od of <u>2</u> y	ears
				eed five (5) years.	
IIOM t	ne date of it	butilet of chips pe	DIME HOU TO CALO.		
				•	
			Authorized by	y:	
	,			-3 / <sup>2</sup>	
ىرك	Veau Constitution Administr	ala D	Kaber	16 Sund	lia
W	ater Quality		Wyoming Dept	. of Environmental Q	uality
	•				
	November	^ 3, 1977			
	Date o	of Issuance			

# WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY DIVISION State Office Building Cheyenne, Wyoming 82002

PROJECT: Orr Mobile Home Park, Sewer and Water, Paradise Valley

ARCHITECT OR ENGINEER: C. K. Wolz - Wolz and Associates, Box 322, Casper, WY 82601

WATER QUALITY DIVISION REFERENCE NUMBER: 77-361

REVIEWING ENGINEER: Jake Strohman, William L. Garland, P.E.

DATE OF REVIEW: 9-21-77

W War

ACTION:

CONSTRUCTION IS NOT AUTHORIZED

COMMENTS:

- 1. Need letter of acceptance from utility.
- 2. The cleanout on the 2.143% 6" line to MH#1 will have to be changed to a manhole.
- 3. Need specifications and details of cleanout by MH#3.
- 4. PVC sewer pipe shall meet specifications of ASTM D3034.
- 5. What is the water pressure furnished by the system at this location?

/ <u>^</u> / New / <u>_</u> / Renewal Permit No. 77=362
/_/ Modified
Town of Edgerton - Water Supply Improvements (Name of Facility)
This permit hereby authorizes the applicant:
Town of Edgerton (Last) (First) (Middle)
c/o Sigma Engineering Box 4060
(Street or P.O. Box)
Casper Wyoming 82601
(City) (County) (State)
to construct, install, or modify aWater Supply facility located inTown of Edgerton
(Legal Description)
in the County of Natrona , in the State of
Wyoming. This permit shall be effective for a period of2years
from the date of issuance of this permit not to exceed five (5) years.
Authorized by:
Administrator Water Quality Division  Administrator Wyoming Dept. of Environmental Quality
September 23, 1977
Date of Issuance cc: Mayor Patterson, P.O. Box 407, Edgerton, WY 82635

### WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY DIVISION State Office Building Cheyenne, Wyoming 82002

PROJECT: Edgerton Well No. 6 and 4" connection line to existing transmission

line

ARCHITECT OR ENGINEER: R. L. Streeter, II - Sigma Engineering, Box 4060. Casper, Wyoming 82601

WATER QUALITY DIVISION REFERENCE NUMBER: 477-362

REVIEWING ENGINEER: Jake Strohman, William L. Garland, P.E.

DATE OF REVIEW: 9-21-77

CONSTRUCTION AUTHORIZED (SEE COMMENTS)

COMMENTS:

- Well casing shall terminate a minimum of one foot above well floor.
- 2. Screen end of drain pipe.
- 3. Furnish chemical quality of well water.
- 4. Furnish yield and drawdown data.
  - a. State method
  - Have a pump of at least 1.5 times anticipated flow.
  - Provide data below:
    - 1. Static water level
    - 2. Pumping rate
    - 3. Drawdown during test
    - 4. Recovery water levels
    - Depth of pump setting,

cc: Mayor Patterson, P.O. Box 407, Edgerton, WY 82635

/ <u>X_</u> /	New			
//	Renewal		Permit No. 772	363R 🗸
//	Modified			
		Granger Sewage		
		·	of Facility)	
	This	permit hereby auth	orizes the applican	nt:
			·	
		Town of Grange (Last)	r (First)	(Middle)
			•	, ,
		P. O. Box 42 -	(Street or P.O.	Box)
		Granger	Sweetwater	Wyoming 82934
		(City)	(County)	(State)
to so	netruat ins	tall, or modify a _	Wastewater Lagoon	
		· -		- Company of the Comp
facili	ity located	in_Section 29, T19	N, KIIIW (Legal Description	1)
in the	e County of	Sweetwater	,	in the State of
Wyomin	ng. This pe	rmit shall be effec	tive for a period (	of 2 years
		issuance of this pe	•	
12011	ene date or	robdance or bhird po		, , , ,
			Authorized by:	
( <u>v) 0</u>	Oiren S (	In Da Q	Lier-	E John Men Director
Ţ	Water Qualit		Wyoming Dept. o	f Environmental Quality
	February 15			
cc: N	Date lelson Engine	of Issuance eering, ATTN: Frank	Grimes, P. O. Box	1141, Jackson, Wyoming

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION
State Office Building
Cheyenne, Wyoming 82002

PROJECT: Town of Granger, Sewage Treatment Lagoon, Granger, Wyoming

ARCHITECT OR ENGINEER: Nelson Engineering, P.O. Box 1141, Jackson, WY 83001

WATER QUALITY DIVISION REFERENCE NUMBER: 77-363

REVIEWING ENGINEER: David W. Hill, Don Armstrong, P.E., William L. Garland, P.E.

DATE OF REVIEW: September 23, 1977

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

COMMENTS:

#### GENERAL

- Please have owner of owners designated representative fill out and submit two copies "Application for Permit to Construct, Install....."
- Submit two copies of all plans and specifications. One set shall be returned to you upon our authorization.
- 3) Submit complete design data (i.e. population, average flows, peak flows, surface area, detention times, seepage, evaporation, etc.)
- 4) An operation and maintenance guide is recommended.

### INFLUENT FLOW RECORDER

5) The influent flow recorder (if used) will not be allowed in a manhole. A small building or other arrangement must be provided.

#### LIFT STATION

- 6) Each lift pump must be able to handle peak flows.
- 7) You indicate that the pump motors shall use 230 V., 1 Ø power, yet on 4-43 it is indicated that 115V., 1 Ø service shall be provided. Please straighten this out for us.
- 8) The force main shall meet water line criteria. The PVC pipe shall meet AWWA C900-75.
- 9) Indicate where the overflow from the lift station discharges to.

- 10) The discharge piping shall be no smaller than four inches in size.
- 11) The vent of the wet well needs a screen on the end.
- 12) Use holding ratchets on the hatches for additional safety,
- 13) The discharge line gate valves must be operational from outside the wet well. Provide details.
- 14) In order to protect the grinder pumps from large objects, we highly recommend the use of a bar screen before the lift station.
- 15) Provide details of the automatic discharge connection,
- 16) The wet well floor shall have a minimum slope of 1 to 1 to the hopper bottom containing the submersible grinder pumps.
- 17) Adequate provisions must be made for power outages. Please discuss.

#### **LAGOONS**

- 18) Splash blocks are needed for the influent lines to Cells #2 and #3.
- 19) The transfer structure must not draw wastewater (and sludge) off the bottom of the cells (i.e. cell #2 effluent). It is advisable to have multiple drawoff points from varing depths for all cells in order to draw off the best effluent.
- 20) The well bottoms shall be as level as possible. Provide a specification covering this.
- 21) Indicate the depth to which the cells bottom soil will be scarified and compacted. How much seepage is expected.
- The lagoon embankments shall be seeded from the outside toe of the dike to approximately one foot above the high water line. Supply details.
- 23) Will riprap be required to minimize dike erosion?
- 24) The invert of the outfall pipes from the transfer structures at cells #1 and #2 should be at the bottom elevation of the structure in order to minimize solids deposition.
- 25) Please explain the rationale for using C.M.P. pipe for the transfer structures, transfer piping and chlorine contact chamber. The high sulfates and chlorine would tend to corrode this pipe.

### CHLORINE CONTACT CHAMBER

- 26) The contact chamber must provide at least 15 minutes detention time. Will this be provided?
- 27) A 36 inch chlorination well is too small for a maintenance man to work in. No smaller than a 42 inch diameter structure is needed.
- 28) Baffles should be provided to stop short circuting.
- 29) Floating solids must be kept out of the discharge. A baffle or some alternative must be provided at the outfall from the contact chamber.
- 30) Submit chlorine diffuser details.
- 31) Submit heating details for the chlorination building.
- 32) The use of a single hypochlorite solution tank is not recommended. Calcium hypochlorite reacts with the hardness in the water to precipitate calcium carbonate. This easily clogs hypochlorinators, suction lines, etc. The mixed water-calcium hypochorite solution should be allowed to settle 12-24 hrs. The clear supernutenant can then be drawn off into another tank for use with the hypochlorinator.
- 33) How will the mixing water and calcium hypochorite be mixed? A mechanical mixer may be needed.
- 34) How and where will the mixing water be obtained?

/ <u>X</u> /	New				
//	Renewal		Permit No	77 - 364R	
//	Modified				
	,				
		Sage Bluffs Fi	ling No. 1		
		(Name	of Facility)	•	
	This	permit hereby autl	horizes the appl	icant:	
•					
		Pulte Home C			
		(Last)	(First)	(Middle)	
		15335 East F	lorida Avenue	O P	
			(Street or P	,	
		Denver (City)	(County)	Colorado 80200 (State)	
		n Section 33, T	Collection	ution & Waste Collecti	<u></u>
in the	County of _	Campbell		, in the State of	
Wyomin	g. This per	mit shall be effe	ctive for a peri	od of <u>2</u> year	rs
from t	he date of i	ssuance of this pe	ermit not to exc	eed five (5) years.	
	,				
			Authorized b	y:	
<u>.</u>	Qio Q(	Jalo D	forte	Director	
W	ater Quality		Wyoming Dept	. of Environmental Qua	lity
	December	15, 1977			

Date of Issuance cc: Meurer, Serafini, Meurer, Inc., P.O. Box 219, Rawlins, WY 82301



PULTE HOME CORPORATION 2275 East Arapahoe Road, Suite 316 Littleton, Colorado 80122 (303) 794-4560

January 13, 1978



77-364

State of Wyoming Department of Environmental Quality Water Quality Division Cheyenne, Wyoming 82002

Gentlemen:

We ask that you note the address correction on our Permit Number 77-364R.

The stated address of 15335 East Florida Avenue, Denver, Colorado, 80200, should be corrected to be 2275 East Arapahoe Road, Suite 316, Littleton, Colorado, 80122.

We ask that any further correspondence be directed to us at this address.

Thank you.

Robert B. Brisnehan,

∛ice-President

RBB/cf

## WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY DIVISION State Office Building Cheyenne, Wyoming 82002

PROJECT: Sage Bluffs, Section 33, T50N, R72W, Gillette, WY, Campbell Co.

ARCHITECT OR ENGINEER: Meurer, Serafini, Meurer, Inc., P.O. Box 219,

Rawlins, Wyoming 82801

WATER QUALITY DIVISION REFERENCE NUMBER: 77-364

Roy E. Prior, William L. Garland, P.E.

REVIEWING ENGINEER: ROY E. Prior, William L. Gariand, P.E.

DATE OF REVIEW: 11-1-77

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

#### COMMENTS:

1. Deadend mains shall have fire hydrant or flushing hydrant.

- 2. End of sewerlines must have manholes or cleanouts. Cleanouts can only be used if the line is 150 feet or less.
- 3. PVC water pipe must meet AWWA C-900 specifications.
- 4. The specifications in the plans are not consistant with the specifications provided under seperate cover.
- The water, sewer and storm sewer crossings are not consistent with Chapter III, Section 15 of the Water Quality Rules and Regulations.
- 6. Sterilization specifications for waterlines should conform to AWWA C601-68.
- 7. Infiltration and exfiltration maximums should be 200 gal./inch, dia./mile/day.
- 8. Wye branches should be used instead of tees.
- Provide typical drawings of the waterline depressions.
- 10. ASTM C-200 specification has been withdrawn.
- 11. Bedding specifications are not clear. There should be special bedding proceedures for A.C. pipe, PVC, iron, rock, etc. What is class "B" bedding?

Sage Bluffs, Section 33, T50N, R72W, Gillette, WY, Campbell Co. 77-364

- 12. The specifications and drawings differin the type of sewer pipe that will be used in the subdivision. Please clarify.
- 13. Provide a typical drawing of the installation of pipe through casings. Any change from the approved type of installation would require a permit to modify.
- 14. Due to the number of comments this cannot be considered a final review.

### REP/jo

cc: Pulte Home Corporation, 15335 E. Florida Avenue, Denver, CO 80200 City of Gillette, Department of Planning and Development, P.O. Box 540, Gillette, WY 82716



## Department of Environmental Quality Water Quality Division

#### **HATHAWAY BUILDING**

CHEYENNE, WYOMING 82002

TELEPHONE 307 777-7781

October 11, 1977

Mr. J. W. Wilson Town of Big Piney P.O. Box 70 Big Piney, Wyoming 83113

Dear Mr. Wilson:

RE: Water Well #4 -77-365

We appreciate your efforts to submit "AS BUILT" plans to us.

The "AS BUILT" plans have been reviewed and the following comments have been generated:

- Please submit capping details and surface grouting details (if any).
- 2) Is a vent provided for the casing? Lack of a vent tends to cause leaks around the casing seal.
- 3) A means for measuring water depth is desirable.
- 4) How high is the casing top above the wellhouse floor?
- 5) Detailed specifications are needed for the flow meter, flow control valve, check valve, pressure relief valve, ductile iron pipe, etc.
- 6) Where does the discharge from the pressure relief valve flow to?
- 7) A sump is needed to collect seepage in the wellhouse. A sump pump is needed. Also supply slope details of the wellhouse floor.
- 8) The manhole to the wellhouse should be framed four inches and preferably six inches above the surface of the roof. This manhole should be fitted with a solid watertight cover which overlaps the framed opening and extends down around the frame at least two inches. It should be locked and hinged.

Mr. J. W. Wilson October 11, 1977 Page 2

We will review the resubmissions. You will be expected to reconstruct your well house, if necessary, to meet our minimum design standards. However, no reconstruction can take place until authorization is received from this Department.

If any question comes up, please feel free to contact us.

Sincerely,

David W. Hill

Environmental Engineer Water Quality Division

hand W Hall

DWH/jo

cc: Peter M. Jorgensen, P.O. Box 1142, Jackson, WY 83001

## WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY DIVISION State Office Building Cheyenne, Wyoming 82002

PROJECT: Dia-Log Septic System, Lot 12, Westgate Park Subdivision, Sec. 28, T34N, R80W

ARCHITECT OR ENGINEER: E. C. Lenhart - 632 South David, Casper, WY 82601

WATER QUALITY DIVISION REFERENCE NUMBER: 77-366

REVIEWING ENGINEER: Jake Strohman, William L. Garland, P.E.

DATE OF REVIEW: 9-22-77

ACTION:

CONSTRUCTION IS NOT AUTHORIZED

COMMENTS: 1. 10 ft. horizontal separation required between water & sewer lines.

 Need cleanout on bend in sewer line preceding septic tanks and coming out of building.

 Indicate how estimated flows were derived (i.e. number of employees, customers, flows per capita and washes, etc.)

/ <u>X</u> ./	New				
//	Renewal		Permit No	77-365R	
//	Modified				
		Town of Big Piney - '(Name of	Well #4 Facility)		
	This	permit hereby author	rizes the appli	cant:	
		Town of Big Pi			_
		(Last) c/o James W. W P.O. Box 70	(First) ilgon:e:	(Middle)	
			(Street or P.	0. Box)	_
		Big Piney	Sublette	Wyoming 83113	
		(City)	(County)	(State)	
to cor	istruct, inst	all, or modify a	Well #4		—
facili	ity located :	in the Town of Big	Piney		_
			(Legal Descript	ion)	
in the	e County of _	Sublette		_, in the State of	
Wyomir	ng. This pe	cmit shall be effect	ive for a perio	od of 2 year	:s
from t	the date of :	issuance of this per	mit not to exce	ed five (5) years.	
				·	
			Authorized by	7:	
	00 · Q	0-0	Filera	6 Jundin	
	<u>XVICN</u> Adminis Water Qualit		Wyoming Dept	Director of Environmental Qual	lity
			·		
	December	19, 1977			
cc:		of Issuance rgensen, P.O. Box 114	42, Jackson, Wy	oming 83001	

### WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY DIVISION State Office Building Cheyenne, Wyoming 82002

PROJECT: Town of Big Piney - Well #4, Big Piney, Wyoming

ARCHITECT OR ENGINEER: Peter M. Jorgensen, Submitted by: James W. Wilson,

Water Commissioner, Town of Big Piney, P.O. Box 70,

Big Piney, Wyoming 83113 WATER QUALITY DIVISION REFERENCE NUMBER: 77-365R

REVIEWING ENGINEER: Frank R. Harman, P.E.

DATE OF REVIEW: December 15, 1977

ACTION: AUTHORIZED FOR CONSTRUCTION

COMMENTS:

#### Well Property

A clear minimum distance of 50 feet radius around the well should be designated for the well above. No sewer lines or other sources of contamination shall be located within this 50 feet property.

FRH/io

cc: Peter M. Jorgensen, P.O. Box 1142, Jackson, Wyoming 83001

			-	
/ <u>X</u> /	New			
<i></i> /	Renewal	•	Permit No	77-366R
·—·		**		77 3001
//	Modified			
			-	• .
		Dia-Log Septic	System (Westgate I	Park Sub,)
		(Name	of Facility)	
	This	permit hereby auti	horizes the applic	eant:
	9			
	* 1			_
	•••	Stephen	Sasser	F. (N: 227.)
•		(Last)	(First)	(Middle)
		516 N. Lennox	(Street or P.O	) Port)
		Casper		•
		(City)	Natrona	Wyoming 82601 (State)
•		(CILY)	(County)	(State)
to cor	struct inst	all, or modify a	Septic System	
		Soction 20		•
facili	ty located i	n Section 20;	(Legal Descripti	on)
		Natrona	(B-r Breezefe	
in the	County of _	That of the		, in the State of
Wyomin	ng. This per	mit shall be effe	ctive for a period	of 2 years
from t	the date of i	ssuance of this ne	ermit not to excee	ed five (5) years.
cc:				uth David, Casper, WY 8260
				aon barray babbers in Octob
			Authorized by:	
000	0,-	Da. 0. 0	Hoperi	Edundin.
<u> </u>	Administ		1	Director
W	later Quality	Division	Wyoming Dept.	of Environmental Quality

November 3, 1977

Date of Issuance
This permit does not supercede the requirements for obtaining a Septic Tank Permit from Natrona County Health Department.

/ <u>X</u> /	New			
//	Renewal		Permit No. 27	667_ <b></b>
//	Modified	•		
		air Scouts of the L	J.S.A., Childs Sprir	ig No. 2 🖠
	mi d _		•	.,
	This	permit hereby author	orizes the appricant	••
		Girl Scouts of t	the U.S.A.	
		c/o John Donnell P.O. Box 13	(First) and Associates	(Middle)
			(Street or P.O. I	Box)
	*	Worland	Washakie	Wyoming 82401
		(City)	(County)	(State)
to cor	nstruct, ins	tall, or modify a	Water 9	· · · · · · · · · · · · · · · · · · ·
	ity located :	Toncloop WV		
Tacili	ity focated .		(Legal Description)	)
in the	County of _	Washakie		in the State of
Wyomin	ng. This pe	rmit shall be effect	tive for a period o	£years
from t	the date of	issuance of this per	rmit not to exceed :	five (5) years.
NOTE:	ENSURE AN AT THE STO	AIR GAP OR INSTALL OCK WATERING TANK.	A REDUCED PRESSURE	BACKFLOW PREVENTOR
			Authorized by:	
رياز	Dian J.	Dala D	Lover E	Sundin
	Adminis Water Qualit		Wyoming Dept. of	Environmental Quality
	•			
	Septem	ber 23, 1977		
		·	<del></del>	·

/ <u>X</u> /	New		, ,		
//	Renewal		Permit No	77-368	
//	Modified	-			
			herage Wastewater	Disposal System	
		(Nam	e of Facility)		
	This	permit hereby au	thorizes the appl	icant:	
				•	
		School Distr	ict No. 4		
		(Last) c/o Tudor En 450 South Fe	(First) gineering Company deral Blvd.	(Middle)	
			(Street or P	.O. Box)	
		Riverton		Wyoming 82501	
		(City)	(County)	(State)	
		11	Wastewater Dis	posal	
Iacili	ty located i	in inductivity	(Legal Descrip	tion)	
in the	County of _	Big Horn	<u> </u>	_, in the State of	`
Wyomin	ng. This per	mit shall be eff	ective for a peri	od of <u>2</u> y	ears
from t	he date of i	issuance of this	permit not to exc	eed five (5) years.	
			•		
			Authorized b	у:	
( <u>L)</u> 0	Diam P. Q	ala O	Dobers	E. Sundin	
V	Administ Vater Quality	<b>1</b> - · · · · ·	Wyoming Dept	Director . of Environmental Q	uality
	September	· 23 <b>,</b> 1977			
	Date	of Issuance			•

# WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY DIVISION State Office Building Cheyenne, Wyoming 82002

PROJECT: Dickinson Trailer Park, Wastewater Facility, Section 23, T1N, R4E,

Fremont County, Wyoming

ARCHITECT OR ENGINEER: Jerald B. Crews, P.E. - Tudor Engineering Company,

450 South Federal Blvd., Riverton,

William J. G

WY 82501

WATER QUALITY DIVISION REFERENCE NUMBER: 77-369

REVIEWING ENGINEER: David W. Hill, William L. Garland, P.E.

DATE OF REVIEW: October 17, 1977

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

COMMENTS:

#### <u>GENERAL</u>

- 1) In order to adequately protect the water supply, some type of backflow preventor is needed in the potable water line.
- 2) An operation and maintenance guide is needed.
- 3) Sludge handling and disposal must be addressed.

#### AERATION BASIN

- 4) Details are needed of the diffusers.
- 5) The PVC inlet and outlet baffles should be extended to near the bottom of the aeration tanks to guard against short circuting.
- 6) Inlet and outlet "Tees" must be cast iron or schedule 40 PVC.
- 7) An easy opening hatch is preferred on the aeration basin so that the operator can observe the mixed liquor.

### CLARIFIER

- 8) Please submit details of tube settlers. "Ten State Standards" requires a loading of 300 gpsf per day. You are using 800 gpsf per day. Will the tube settlers handle this loading rate satisfactory and produce a high quality effluent.
- 9) The literature suggests that air cleaning, may be required for keeping the tube settlers clean and functioning. Please discuss and elaborate.
- 10) An outlet baffle is required to keep scum out of the effluent.

Dickinson Trailer Park, Wastewater Facility, Section 23, TIN, R4E, Fremont County, Wyoming

77-369

11) Provide details of the top of the air lift riser. Provisions must be made for riser rodding and sludge wasting to the sludge holding tank.

#### <u>GHLORINATOR</u>

- 12) Submit chlorinator details.
- 13) We will reluctantly authorize the use of a tablet chlorinator due to a lack of sufficient historical operating information. The effluent should be monitored closely to determine if satisfactory coliform and chlorine residual numbers are being met. Non-compliance with the discharge permit could result in stiff penalties.

## CHLORINE CONTACT CHAMBER

- 14) The influent and effluent PVC baffles should be extended to near the basin floor to help prevent short circuting.
- 15) Influent and effluent "Tees" must be cast iron or schedule 40 PVC.

#### BLOWER BUILDING

- 16) A gate or butterfly valve must be installed in each blower discharge.
- 17) Discuss heating requirements.
- 18) Have adequate provisions been made to reduce the noise as much as possible?

### SLUDGE HOLDING TANK

19) Our regulations indicate the holding tank will hold only 2-3 weeks waste sludge. A larger holding tank is preferred.

/ <u>X</u> /	New	4		
//	Renewal		Permit No	77-369R ₹
/ <u>X</u> /	Modified			·
	D	ickinson Trafiler P	ark – Wastewäter	Facility /
		(Name	of Facility)	
	This	permit hereby aut	horizes the applic	cant:
		J. R. Contracto	r, Inc.	
		(Last)	(First)	(Middle)
		Route 1, Box 55		<u>-</u>
			(Street or P.	O. Box)
,		Riverton	Fremont	Wyoming 82501
		(City)	(County)	(State)
to com	nstruct, ins	tall, or modify a	Wastewater Fa	cility
faail	ity located :	Section 23, T	1N, R4E	·
IdCII.	ity located .		(Legal Descript:	ion)
in the	e County of _	Fremont		_, in the State of
Wyomin	ng. This per	rmit shall be effe	ctive for a period	d of2years
from t	the date of :	issuance of this p	ermit not to exce	ed five (5) years.
		••		
	•			
			Authorized by	:
۔ الکان	Oce d	Oa Oa Q	Robert	- E Sundin. Director
Ţ	Water Quality		Wyoming Dept.	of Environmental Quality
		er 17, 1977		
		of Issuance	'n c	T. J. http://www.nist.com/27
cc:	ludor Engin	eering company, 45	ou south rederal B	lvd., Riverton, WY 82501

/ <u>X</u> /	New	ı		
//	Renewal	·	Permit No	77-370
//	Modified			
		Western Hills, 1	Oth Filing	
	<u></u>		of Facility)	
	This	permit hereby autho	orizes the appli	cant:
				•
		Northwest Associ		
		(Last)	(First)	(Middle)
		1124 Dumn Avenue		
			(Street or P.	0. Box)
	••	Cheyenne	Laramie	Wyoming 82001
		(City)	(County)	(State)
			Water Distributi	on and Sowage Collection
to con	struct, inst			on and Sewage Collection
facili	ty located i	n Section 13, T14		÷
			(Legal Descript	1011)
in the	County of _	Laramie	· · · · · · · · · · · · · · · · · · ·	_, in the State of
Wyomin	g. This per	mit shall be effect	tive for a period	d of <u>2</u> years
from t	he date of i	ssuance of this per	mit not to exce	ed five (5) years.
		•		
			Authorized by	:
	0	$\mathcal{O}_{\mathcal{O}}}}}}}}}}$		F / 1
<u>UU</u>	Vian 5	- Valend	Beter	N. G. francia
W	Administ ater Quality		Wyoming Dept.	Director of Environmental Quality
	Artoba	er 11, 1977		
		of Issuance	<u> </u>	

/ <u>X</u> /	New			
//	Renewal		Permit No	77-371
//	Modified			
	Are	a 3 Settling Ponds	- Lucky Mc Urani	ium Corporation
	<del></del>	(Name of	Facility)	
	This pe	ermit hereby author	rizes the applica	nt:
		Russell	Jack	
	<del>_</del>	(Last)	(First)	(Middle)
		Shirley Basin M	ine	
	<del></del>		(Street or P.O.	Box)
		Shirley Basin	Carbon	Wyoming 82601
		(City)	(County)	(State)
to con	struct, instal	l, or modify a	2 Settling Ponds	
	ty located in	Section 2, T27N		
	_	(	Legal Description	n)
in the	County of	Carbon	,	in the State of
Wyomin	g. This permi	t shall be effecti	ve for a period o	of <u>l</u> years
from t	he date of iss	suance of this perm	uit not to exceed	five (5) years.
				•
			Authorized by:	
<u>. 00.00</u>	Diam S. Q	0.0	Dobert	E. Sundin
W	Administra ater Quality D		, · · · · · · · · · · · · · · · · · · ·	Director f Environmental Quality
	. September 2	2; 1977		
	Date of	Issuance	<del>"</del>	

# WIRLE BASINAME

### LUCKY Mc URANIUM CORPORATION

SHIRLEY BASIN MINE

SHIRLEY BASIN, WY 82615

TELEPHONE (307) 356-4312

September 16, 1977

Frank Harmon
DEQ
Water Quality Division
Cheyenne, Wyoming 82001

Dear Sir:

Here are the two copies of our maps for the settling ponds. These are an addition to the one copy we left with you in Cheyenne, on September 15, 1977. Thank you.

Sincerely.

Stratford Murdock

SM/In

Map enclosures

Permit already

1884 (77-371)

destroyed additional plans

II m.

# WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY DIVISION State Office Building Cheyenne, Wyoming 82002

PROJECT: Grandview Gardens Trailer Park; Lot 70F; Section 2, T52N, R102W /

ARCHITECT OR ENGINEER: Arwin D. Priest, P.E. - E & M Designs, 3110 S. Wadsworth Blvd., Suite 308, Denver, CO 80227

WATER QUALITY DIVISION REFERENCE NUMBER: 77-372

REVIEWING ENGINEER: Jake Strohman, William L. Garland, P.E.

DATE OF REVIEW: 9-23-77

ACTION: CONSTRUCTION IS NOT AUTHORIZED

COMMENTS: 1. Need letter of acceptance from the City.

- 2. Need material and installation specifications (septic tank, pipes, water riser, etc.)
- Need cap for sewer risers.
- 4. Need inlet and outlet locations on septic tank. Recommend a baffle located 2/3 length from inlet. Need removable covers over inlet and outlet.
- 5. Water line has to be 2 inch minimum from City main through trailer units. A blowoff or flushing valve is required at the end of the line (send detail and specifications).
- 6. A sewer manhole is required at the end of the sewer line (not under a trailer space). Send details and specifications. Send a profile of collection and disposal system. Send alignment specifications.
- 7. Tie ends of leach lines together.

8. Put a concrete block around sewer riser for protection.

9. State depth of water lines, disinfection proceedures and pressure tests. What pressure is the City furnishing at this location.

# WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY DIVISION State Office Building Cheyenne, Wyoming 82002

PROJECT: Grandview Gardens Trailer Park, Lot 70F, Section 2, T52N, R102W,

Park County, Wyoming

ARCHITECT OR ENGINEER: Arwin D. Priest, P.E. - E & M Designs, 3110 South

Wadsworth Blvd., Suite 308, Denver, CO 80227

WATER QUALITY DIVISION REFERENCE NUMBER: 77-372R

REVIEWING ENGINEER: David W. Hill, William L. Garland, P.E.

DATE OF REVIEW: November 16, 1977

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

William S. Garland

#### COMMENTS:

#### WATER SYSTEM

- We need detailed material and installation plans and/or specifications for all waterlines, backfill specifications, flushing valves, valves, etc.)
- 2) A detail drawing of a typical water riser is needed. The water riser shall terminate at least four inches above ground level and be surrounded by a concrete apron or equal.
- 3) The water riser should be located a minimum of five feet horizontally from sewer risers.
- 4) We still need pressure, leakage and disinfection specifications.

#### SEWER LINES

- 5) The manhole is required on the <u>South end</u> of the sewerline. It shall not be located beneath a trailer.
- 6) We need detailed specifications of the sewer pipe material, backfill specifications, infiltration-exfiltration specifications, leakage specifications, alignment specifications, deflection specifications, etc.
- 7) Indicate size of leach field gravel.
- 8) Top of gravel shall be covered with untreated building paper or equivalent (straw, hay, etc.).
- 9) Indicate leach line material with specifications,

Grandview Gardens Trailer: Park, Lot 70F, Section 2, T52N, R102W, Park Co., WY 77-372R

### GENERAL

- 10) Please have owner or owners designated representative fillout and submit two copies of "Application for Permit to Construct, Install....."
- 11) Due to the number of comments, this cannot be considered a complete review.

DWH/jo Enclosure

· _(\subsection '	New	,		
,—,	Renewal	•	7 Permit No.	77-374
' <u></u> ',		•	refinite No.	
//	Modified			
	To	m and Becky Sche	ell Property e of Facility)	
		·		
	This p	ermit hereby au	thorizes the applic	ant:
	•			
	_	Schell	Tom and Beck	
		(Last)	(First)	(Middle)
	_	P.O. Box 294		
			(Street or P.O	. Box)
	· 	Jackson		Wyoming 83001
		(City)	(County)	(State)
to 000	otrust insta	oll or modify a	Commercial Wastew	ater Septic Tank - Elevated
CO COII				
		Continu 12	'	
	ity located in	Continu 12	'	
facili	ity located in	Section 13,	T41N, R117W (Legal Descripti	
facili	ity located in	Section 13, Teton	T41N, R117W (Legal Descripti	on) , in the State of
facili in the	e County of	Teton  it shall be effe	T41N, R117W (Legal Descripti	on) , in the State of of 2 years
facili in the	e County of	Teton  it shall be effe	T41N, R117W (Legal Descripti	on) , in the State of of 2 years
facili in the	e County of	Teton  it shall be effe	T41N, R117W (Legal Descripti	on) , in the State of of 2 years
facili in the	e County of	Teton  it shall be effe	T41N, R117W (Legal Descripti	on) , in the State of of 2 years
facili in the	e County of	Teton  it shall be effe	T41N, R117W  (Legal Descripti  ective for a period permit not to excee	on) , in the State of of 2 years
facili in the	e County of	Teton  it shall be effe	T41N, R117W  (Legal Descripti  ective for a period permit not to excee	on) , in the State of of 2 years
facili in the	e County of	Teton  Teton  Teton  Teton  Teton  Teton  Teton  Teton  Teton	(Legal Descripti ective for a period permit not to excee	on)  , in the State of  of 2 years  d five (5) years.
facili in the Wyomin from t	ty located in the County of  This permethe date of is	Teton  Teton	(Legal Descripti ective for a period permit not to excee	on) , in the State of of 2 years
facili in the Wyomin from t	County of	Teton  Teton	(Legal Descripti ective for a period permit not to excee	on)  , in the State of  of 2 years  d five (5) years.

cc: Peter M. Jorgensen, P.E., P.O. Box 1142, Jackson, WY 83001
Dan Cowee, Teton County Planner, Teton County Courthouse, Jackson, WY 83001

/ <u>X</u> /	New	1		
//	Renewal		Permit No	77-376
//	Modified			
		Dav	Addition	
			of Facility)	
	This p	permit hereby autho	rizes the appl	icant:
		Tarris C M III	, <b>D</b>	
	•	Town of Medicine (Last)	e BOW (First)	(Middle)
			(* 1151)	
		P.O. Box 156	(Street or F	2.0. Box)
	•	Madada Day	·	
	_	Medicine Bow (City)	Carbon (County)	Wyoming 82329 (State)
		(012) /	(county)	
to cor	struct. insta	all, or modify a	Water Distribu	ution Line
		Section 5, T22N		
Iaclli	ty located in		(Legal Descrip	tion)
in the	County of	Carbon		, in the State of
		nit shall be effect	ive for a peri	od of <u>2</u> years
				eed five (5) years.
			Authorized b	y:
<u>Ce</u>	Administr Vater Quality	· · · ·	Hyoming Dept	Director  of Environmental Quality
r			myoming Depo	
	Oct cl	on 10 1077		
	OCCODE	er 12, 1977		· ·

cc: Banner and Associates, Inc., P.O. Box 550, Laramie, WY 82070

/ <u>X</u> / New	1 1		•
// Renewal	•	Permit No.	77~377
/ Modified			
·			
	<u>.</u>		•
	RDM Trucking Wastewa	ter Disposal Facility)	•
This	permit hereby author	rizes the appli	icant:
• 1			•
	Reker	Steven	Alan
	(Last)	(First)	(Middle)
	1971 Yellowstone		
	C	(Street or P.	·
	Casper	Natrona ————————————————————————————————————	Wyoming 82601
	(City)	(County)	(State)
to construct, inst	all, or modify a	<u>Wastewater D</u>	isposal
facility located i	n Section 22, T34N.	, R79W, Lot 4B l Legal Descript	Interstate Park Sub.
		regar nescript	1011)
in the County of _	<u>Natrona</u>		_, in the State of
lyoming. This per	mit shall be effecti	ve for a perio	od ofyears
rom the date of i	ssuance of this perm	nit not to exce	ed five (5) years.
•	terson, P.E., 437 S.		
,,, ., .,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	_οριασο, σασραι	, W. OLOO!
	5	Authorized by	· ·
William &	Inche O	Lover	E Sumilia
Administ Water Quality	\ \ \	Wyoming Dept.	Director of Environmental Qualit
Hater Anathri		"Journa Debr:	
Octob	per 11, 1977 -		•
	of Issuance	<u> </u>	
0			

This permit <u>does not</u> supercede the requirements for obtaining a Septic Tank Permit from Natrona County Health Department.

# WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY DIVISION State Office Building Cheyenne, Wyoming 82002

PROJECT: Commercial Addition, Water Extension, City of Worland

ARCHITECT OR ENGINEER: John W. Donnell, P.E. - P.O. Box 13, Worland, WY 82401

WATER QUALITY DIVISION REFERENCE NUMBER: 77-378

REVIEWING ENGINEER: Jake Strohman, William L. Garland, P.E.

DATE OF REVIEW: 9-28-77

ACTION: CONSTRUCTION IS NOT AUTHORIZED

COMMENTS:

1. A fire hydrant, flushing hydrant or blowoff valve is required at the end of the water system. Any alternative other than a fire hydrant requires details and specifications.

2. The extension to the City will have to be a minimum of six (6) inch diameter pipe throughout the entire length. No 4 inch line.

/ <u>X</u> /	New	t	· •	
//	Renewal		Permit No	77-379
//	Modified			
		John Vigil Tra	iler Units	
		(Name o	of Facility)	
	This	permit hereby authorized	orizes the applic	cant:
		Vigil	John	
		(Last)ohn W. Do P.O. Box 13	nnell <sup>(First)</sup>	(Middle)
		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	(Street or P.	0. Box)
		Worland	Washakie	Wyoming 82401
		(City)	(County)	(State)
to con	struct, inst	all, or modify a	Sewer and Wate	r
•	ty located i	Tract 12-25		•
100111	.c, 100 <b>01</b> 00 -		(Legal Descript:	ion)
in the	County of _	Washakie		_, in the State of
Wyomin	ng. This per	mit shall be effec	tive for a period	d ofyears
		issuance of this pe		
		· · · · · · · · · · · · · · · · · · ·		
			Authorized by	:
\ 0 \.(	n0;	(Az 04 D	Dobert	E Sundin
V.	Administ Vater Quality	rator Division	Wyoming Dept.	Director of Environmental Quality
	Octob	er 11, 1977		
	Date	of Issuance		

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY DIVISION State Office Building Cheyenne, Wyoming 82002

PROJECT:

Gentury Geophysical Corporation, Section 24, T33N, R80W,

Natrona County

ARCHITECT OR ENGINEER: Edwin S. Rate, Jr., P.E. - Western Construction, Inc.,

P.O. Box 930, Casper, WY 82602

WATER QUALITY DIVISION REFERENCE NUMBER: 37-380

REVIEWING ENGINEER: Jake Strohman, William L. Garland, P.E.

DATE OF REVIEW: October 27, 1977

ACTION: CONSTRUCTION IS NOT AUTHORIZED

COMMENTS:

What is the use of the sump and estimated flows?

/ <u>X</u> /	New			·
//	Renewal		Permit No	77-380R
	Modified	**		
//	MOUTITED			
			•	•
		<del> </del>	ical Corporation	
-		(Nam	e of Facility)	
	This	permit hereby au	thorizes the appli	cant:
	• •			e e
		Western Constr	uction, Inc.	
•		(Last)	(First)	(Middle)
		P.O. Box 930		
			(Street or P.	•
		Casper	Natrona	Wyoming 82602
		(City)	(County)	(State)
•	· · · · · ·		Waste Treatmen	t
to cons	struct, insi	tall, or modify a		
facilit	y located :	in Section 24	, T33N, R80W	
-			(Legal Descript	.10n)
in the	County of _	Natrona		_, in the State of
Wyoming	. This per	rmit shall be effo	ective for a perio	d of <u>2</u> years
from th	e date of i	issuance of this	permit not to exce	ed five (5) years.
				,
	•		. Authorized by	:
	-			٠
Q.Q	Dia P1	Jala D	Hober	6. Sundin
Wa	Administ ter Quality		Wyoming Dept.	Director of Environmental Quality
				· .
	Octobe	r 25, 1977		••
	200000	,, .		

Date of Issuance

This permit <u>does not</u> supercede the requirements for obtaining a Septic Tank Permit from Natrona County Health Department.

/ <u>X</u> / New			
// Renewal		Permit No.	77:381.
// Modified	•		
_		•	•
	Keffeler Electro Osm	osis System∜	
		Facility)	
Thi	s permit hereby author	izes the appl	icant:
	Keffeler	Bruce	М.
	(Last)	(First)	(Middle)
	114 N. McKinley		
	·	(Street or P	.0. Box)
	Casper	Natrona	Wyoming 82601
	(City)	(County)	(State)
to construct, ins	stall, or modify a	Waste Tre	eatment
facility located	in Section 8, To	32N, R80W Legal Descript	tion)
in the County of			, in the State of
Wyoming. This pe	ermit shall be effecti	ve for a perio	od ofyears
from the date of	issuance of this perm	nit not to exce	eed five (5) years.
cc: Western Co	nstruction Company, P.Q	). Box 930, Cas	per, WY 82602
		Authorized by	y:
William S Adminis	1 1	Rober	v E Sundin Director
Water Qualit	y DWvision	Wyoming Dept	of Environmental Quality

October 11, 1977

Date of Issuance

This permit  $\underline{\text{does not}}$  supercede the requirements for obtaining a Septic Tank Permit from Natrona County Health Department.

/X/ New
// Renewal . Permit No. 272-382
/ / Modified
// Monified
Roberts Drilling - Trailer Units 🖟
(Name of Facility)
This permit hereby authorizes the applicant:
· s ^
Roberts Sam
(Last) (First) (Middle)
4061 Valley Road
(Street or P.O. Box)
Casper Natrona Wyoming 82601
(City) (County) (State)
Waste Treatment
to construct, install, or modify a
facility located in
(Legal Description) Natrona
in the County of, in the State of
Wyoming. This permit shall be effective for a period of years
from the date of issuance of this permit not to exceed five (5) years.
cc: Harry O. Patterson, P.E., 437 S. Spruce, Casper, WY 82601
Authorized by:
O(1) = O(1) = O(1)
Administrator Director
Water Quality Division Wyoming Dept. of Environmental Quali
Octobon 11 1077
October 11, 1977  Date of Issuance

This permit does not supercede the requirements for obtaining a Septic Tank Permit from Natrona County Health Department.

/ <u>X</u> /	New			
//	Renewal		Permit No	77-383
//	Modified			
		Sun Valley Di	stribution Main	
		(Name	of Facility)	
	This	permit hereby aut	horizes the appli	icant:
		Board of Publ	ic Utilities	
	-	(Last) c/o Banner and P.O. Box 550	(First) d Associates	(Middle)
	-		(Street or P.	.O. Box)
	_	Laramie		Wyoming 82070
		(City)	(County)	(State)
to con	astruct, insta	all, or modify a	Water Distribut	ion Main
	ty located in	Soction 24 0 C	35, T14N and Sec.	3 & 4, T13N, R66W
		-	(Legal Descript	ion)
in the	County of _	Laramie		_, in the State of
Wyomin	g. This perm	nit shall be effe	ctive for a perio	od of 2 years
				eed five (5) years.
		1		(-, J
		•		
			Authorized by	<b>7:</b>
۔ اور	Diam J.	Jala Q	Lover	E. Sundin
W	Administr ater Quality	11	Wyoming Dept.	Director of Environmental Quality
	Octobe	r 7, 1977		
		of Issuance		

# WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY DIVISION State Office Building Cheyenne, Wyoming 82002

PROJECT: City of Sheridan - Water System Improvements I

ARCHITECT OR ENGINEER: Howard, Needles, Tammen and Bergendoff, Inc., Attention:

Clyde H. Dolan, P.O. Box 3478, Intermountain Bldg.,

Casper, WY 82601

WATER QUALITY DIVISION REFERENCE NUMBER: 77-384M

REVIEWING ENGINEER: Dan H. Kim, William L. Garland, P.E.

DATE OF REVIEW: October 24, 1977

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

COMMENTS:

- Enclosed is an application form, which should be completed and returned to our office.
- 2) Is the installation of 4 M. G. water storage tank included in this project? If not, when will it be constructed? A permit from our office is required before the water tank is installed.
- 3) The open end of an air relief pipe should extend at least 1 foot above grade and be provided with a screen.
- 4) Crossing under ditch on sheet 7 does not meet the provisions of 10 State Standards. Please justify your design.
- 5) Water valves should be located at not more than 800 foot intervals on distribution lines. Please comment on the anticipated use of the 24" 20" line.
- 6) The blowoff drain pipe should terminate at least 2 feet above the ground surface. A distance should be provided from natural ground level or highest flood level to the pipe end.
- 7) This cannot be considered a final review.

/ <u>X</u> /	New			
//	Renewal		Permit No7	7-384MR
//	Modified			
	<u> </u>	ity of Sheridan - Wo (Name o	ater System Improve of Facility)	ements I
	This	permit hereby author	rizes the applicar	nt:
		Marshall	М.	Dean
		(Last)	(First)	(Middle)
		City Hall	(,	,
			(Street or P.O.	Box)
		Sheridan	Sheridan	Wyoming 82801
		(City)	(County)	(State)
	nstruct, inst	sall, or modify a Section 28 & 1	29, T56N, R84W	ion Line (24" & 20")
•		<b>~</b>	(Legal Description	1)
in the	County of _	Sheridan	,	in the State of
Wyomin	ng. This per	rmit shall be effect	tive for a period o	ofyears
from t	the date of i	issuance of this per	rmit not to exceed	five (5) years.
			Authorized by:	
. <u></u> .	Administ	1.1	-	Director f Environmental Quality
	November	28, 1977		
		of Issuance		
cc:		lan, HNTB, Inc., P.(	O. Box 3478, Intern	mountain Bldg.,

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION
State Office Building
Cheyenne, Wyoming 82002

PROJECT: Gity of Sheridan - Water System Improvements II

ARCHITECT OR ENGINEER: Clyde Dolan - Howard, Needles, Tammen and Bergendoff, Inc.,

P.O. Box 3478, Intermountain Bldg., Casper, WY 82601

WATER QUALITY DIVISION REFERENCE NUMBER: 177-385M

REVIEWING ENGINEER: Dan H. Kim, William L. Garland, P.E.

DATE OF REVIEW: October 24, 1977

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

COMMENTS:

- Enclosed is an application for a permit to construct, which should be completed and returned to our office.
- 2) Water valves should be located at not more than 800 foot intervals on distribution lines. The 24 inch line appears to be a transmission line and as such would not require extensive valving. Please comment on the anticipated use of the 24" - 20" line.
- 3) Typical drawings of blowoff, fire hydrant and air relief valve should be included in the plans.
- 4) This cannot be considered a final review.

/ <u>X</u> /	New	į	•	
//	Renewal		Permit No	77-385MR
//	Modified			
	Ci	ty of Sheridan - Wame	ater System Impr of Facility)	ovements II
	This	permit hereby auth	orizes the appli	icant:
		Marshall c/o Howard, Need P.O. Box 3478 -		Dean (Middle) Bergendoff, Inc. ldg.
			(Street or P.	.O. Box)
		Casper		Wyoming 82601
		(City)	(County)	(State)
to con	struct, inst	Lair, or modify a _	Water Transmiss	ion Line (20")
facili	ty located i	in	27, T56N, R84W (Legal Descript	ion)
	_	Sheridan	(negai bescript	
	County of _		·	, in the State of
Wyomin	g. This per	mit shall be effec	tive for a perio	od ofyears
from t	he date of i	issuance of this pe	rmit not to exce	eed five (5) years.
		•	Authorized by	y <b>:</b>
<u>س</u>	Oion & C	Jalan	Lour	E. Lundin
W	Administ Vater Quality		Wyoming Dept.	Director of Environmental Quality
			<b>, , , ,</b> .	•
	Novembe	r 18, <u>1</u> 977		·
<del></del>	Date	of Issuance	<del></del>	

/ <u>X</u> /	New	ŧ		
//	Renewal		Permit No. 7	7-386M
//	Modified			
			Home Park	<del> </del>
		(Name	of Facility)	
	This	permit hereby aut	horizes the applican	t:
		City of Lander		
-		c/d <sup>st</sup> ) E. Spur 183 South Four	rlock, Jr City Eng th Street	gineer (Middle)
			(Street or P.O.	Box)
		Lander	Fremont	Wyoming 82520
		(City)	(County)	(State)
		·		
to con	nstruct, ins	tall, or modify a	Water and Sewer Serv	vice Lines
facil	ity located :	<sub>in</sub> the City of La	nder	
			(Legal Description	.)
in the	e County of	Fremont	,	in the State of
Wyomin	ng. This per	rmit shall be effe	ctive for a period o	f <u>2</u> years
from t	the date of :	issuance of this p	ermit not to exceed	five (5) years.
• •				
			•	
			Authorized by:	
<u> </u>	Dea P.	Jala Q	Lobers (	E Sunda
1	Adminis Water Quality			irector Environmental Quality
'		,	,	
	0cto	ber 26, 1977		,
		of Issuance		

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION
State Office Building
Cheyenne, Wyoming 82002

PROJECT: City of Sheridan - Water System Improvement III

ARCHITECT OR ENGINEER: Clyde H. Dolan - Howard, Needles, Tammen and Bergendoff,

P.O. Box 3478, Intermountain Bldg., Casper,

WY 82601

WATER QUALITY DIVISION REFERENCE NUMBER: 77-387M

REVIEWING ENGINEER: Dan H. Kim, William L. Garland, P.E.

DATE OF REVIEW: October 24, 1977

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

Welliam J. Garland

#### COMMENTS:

- 1) Enclosed is an application for a permit to construct, which should be completed and returned to our office.
- 2) Underwater crossing does not meet 10 State Standards. A valve closest to the supply source shall be in a manhole and permanent taps are required as well as valves being at both sides of water crossings. Please justify your design.
- 3) What lubrication will be used to push or pull the pipe through the sleeve in highway bore crossing?
- 4) What will be done with the drainage collected at sump pit in pressure reducing valve vault?
- 5) Water valves should be located at not more than 800 foot intervals on distribution lines. The 24 inch line appears to be a transmission line and as such would not require extensive valving. Please comment on the anticipated use of the 24% 20% line.
- 6) This cannot be considered a final review.

/ <u>X</u> /	New	<b>1</b>		
//	Renewal		Permit No	77-387MR
//	Modified			
	C:	ity of Sheridan -		Improvements III
		(Name of	f Facility)	
	This per	mit hereby autho	rizes the appli	lcant:
		÷		
	Ma	ırshall	М.	Dean
		(Last) o Howard, Needle o. Box 3478 - In		
			(Street or P.	0. Box)
	Ca	isper		Wyoming 82601
	****	(City)	(County)	(State)
to con	struct, install	, or modify a		nprovements
facili	ty located in	the City of Sh	eridan (Legal Descript	ion)
in the	County of	Sheridan		, in the State of
Wyomin	g. This permit	shall be effect	ive for a perio	od of2years
				eed five (5) years.
			Authorized by	<b>7:</b>
				<i></i> //
こっつつ	$\mathcal{O}_{\mathcal{Q}}$	~.O~ O	Lovers	6 Sunden
W	Administration Administration Discourage (National Control of Cont		Wyoming Dept	Director of Environmental Quality
		·		
	November 18,	1977		
	Date of	Tesuance	<del></del>	

	•		
/X/ New			
// Renewal		Permit No.	77-388MRR
/ / Modified			
,			
Ţ	own of Baggs Sewage T (Name o	reatment Facil f Facility)	ity
This	s permit hereby autho	rizes the appl	icant:
·	Tayna of Dogge		
$\frac{1}{N} = \frac{1}{N} \left( \frac{1}{N} \right)^{\frac{1}{N}} = \frac{1}{N} \left( \frac{1}{N} \right)^{\frac{1}{$	Town of Baggs (Last)	(First)	(Middle)
1	P. O. Box 121		
		(Street or P	.O. Box)
	Baggs	Carbon	Wyoming 82321
	(City)	(County)	(State)
	in Section 5, T21N,		nt Facility (Lagoons)
in the County of	Carbon		, in the State of
Wyoming. This pe	ermit shall be effect:	ive for a perio	od of <u>2</u> years
from the date of	issuance of this perm	mit not to exc	eed five (5) years.
٠.	•		
•		Authorized by	y:
Water Qualit	1)	Lober Wyoming Dept	Director of Environmental Quality
11 00			•

May 23, 1978

Date of Issuance
cc: Barbara Scott, 523 West 29th Street, Cheyenne, Wyoming 82001

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION
Hathaway Office Building
Cheyenne, Wyoming 82002

PROJECT: Town of Baggs - Sewage Lagoon

Carbon County

ARCHITECT OR ENGINEER: Barbara Scott, P.E.

523 West 27th Street

Cheyenne, Wyoming 82001

WATER QUALITY DIVISION REFERENCE NUMBER: 77-388MR

REVIEWING ENGINEER: Dan H. Kim - Don Armstrong, P.E

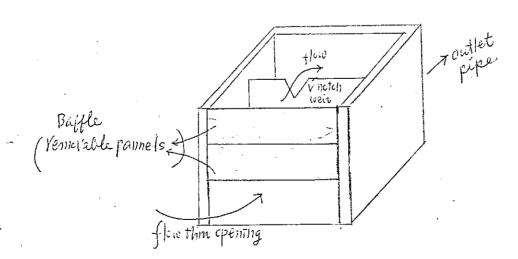
DATE OF REVIEW: February 23, 1978

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

#### **COMMENTS:**

1). What is the design population in 1990? Your design note indicates that 1990 design flow is estimated 87 gpm, which is equivalent to 1253 people, assuming 100 gpd per capita as average flows. However, the total area of the primary cell is 10.06 acres, which is capable of handling sewage flow for only 1006 people based on the design criteria of 10 State Standards. Please clarify.

2). The V notch weir should be preceded by a baffle so that the baffle can prevent scum or floating material from accumulating around the weir area and minimize the effect of direct wind action on the weir. The design of outlet box shown below is strongly recommended.



PROJECT: Town of Baggs - Sewage Lagoon

Carbon County

WATER QUALITY REFERENCE NUMBER: 77-388MR (CONT)

3). Plan of operation should be submitted.

- 4). The saucer shaped depression at the end of influent line should be protected by riprap or concrete from the erosion. Significant erosion is expected because the inlet line does not discharge horizontally into the depression.
- 5). Are there sufficient numbers of warning signs provided along the fence around the pond? There is only one sign board shown in the drawings at the entrance of the lagoon.
- 7). This can not be considered a final review.

# WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY DIVISION State Office Building Chevenne, Wyoming 82002

Town of Baggs - Sewage Treatment Facilities, Carbon County PROJECT:

Barbara Scott, P.E. - 523 W. 27th Street, Chevenne. ARCHITECT OR ENGINEER:

WY 82001

WATER QUALITY DIVISION REFERENCE NUMBER: 77-388M

Dan H. Kim, William L. Garland, P.E. REVIEWING ENGINEER:

October 30, 1977 DATE OF REVIEW:

NOT AUTHORIZED FOR CONSTRUCTION ACTION:

#### COMMENTS:

- Soil characteristic testing data, type and thickness of liner, specifications for the installation of the liners should be submitted.
  - Embankment slopes should not be steeper than 3 to 1.
  - Influent lines should be relocated to minimize short-circuiting within the 1st cell.
  - Surcharging of the sewer upstream from the lagoon is not permitted. Influent lines should be constructed according to 10 State Standards.
  - Details of interconnecting lines which are crossing the creek should be provided.
  - Overflow structure should be constructed per 10 State Standards. Detail drawings should be provided,
  - 7) Provisions for flow measurement shall be constructed on the outlet.
  - The end of the influent line in Cell #1 should rest on a suitable concrete apron with a minimum size of 2 feet square.
  - Details of baffles to be installed in Cell #3 should be provided.
  - 10) This cannot be considered a final review.



11-389 ED HERSCHLER GOVERNOR

# Department of Environmental Quality Water Quality Division

1111 EAST LINCOLNWAY

CHEYENNE, WYOMING 82002

TELEPHONE 307 777-7781

July 8, 1981

#### CERTIFIED

Ron George Bingo Truck Stop Hillsdale, WY 82060

RE: Construction without a permit

Dear Mr. George:

On June 26, 1981, Gary Hickman of the Laramie County Health Department and I met with you concerning problems with the Bingo Truck Stop wastewater disposal system. In evaluating the site, it was noted that seven mobile homes were installed rather than the five that were approved in the Permit to Construct, No. 77-389. As discussed, the wastewater system was not designed for this additional loading which could be causing problems. Also, the semitrailers running over and parking on the drainfield pipe will result in eventual failure.

It is recommended that the drainfield be marked to eliminate any vehicle travel until the system can be evaluated for any damage and for steps to be taken to improve the system.

The installation of the two additional mobile homes onto the existing drainfield is a violation of the Wyoming Environmental Quality Act, Section 35-11-301(a)(iii), which states "No person, except when authorized by a permit issued pursuant to the provisions of this act, shall construct, install, modify or operate any sewerage system, treatment works, disposal system or other facility, capable of causing or contributing to pollution." Any person who violates any provision of the Environmental Quality Act is liable to a penalty of \$10,000 for each day of violation.

Ron George July 8, 1981 Page 2

The Water Quality Division requests that you submit a schedule of items that will bring the system into compliance. This schedule must be received within thirty (30) days of receipt of this letter or else the matter will be turned over to the Attorney General's Office with a request that a complaint be filed in District Court. All plans and specifications must be signed or sealed by a Wyoming Registered Engineer.

If you have any questions, please feel free to contact this office.

Sincerely,

Thomas S. Norman

Water Quality Engineer

Thomas & Norman

TSN/pjb

cc: Gary Hickman

/ <u>X</u> /	New	1		
//	Renewal		Permit No	77-389
//	Modified			
-				
		Bingo Truc		
		(Name	of Facility)	
	This	permit hereby author	orizes the applic	cant:
		Telum, Inc.		
		(Last) c/o Tom Kraft P.O. Box 10448	(First)	(Middle)
			(Street or P.0	O. Box)
		Cheyenne	Laramie	Wyoming 82001
		(City)	(County)	(State)
		all, or modify a _		c Sewage
facili	ity located i	n_ Section 18, T14	(Legal Descript:	ion)
in the	e County of _	Laramie		_, in the State of
Wyomir	ng. This per	mit shall be effec	tive for a period	d of2years
		ssuance of this pe		
			Authorized by	:
<u>.</u>	Dean S	. Jala 2	Lover	E. Sundin
Ţ	Administ Water Quality	1 1	Wyoming Dept.	Director of Environmental Qualit
	Octobe	r 7, 1977		

cc: M. L. Maxwell and Associates, 1418 Bradley Ave., Cheyenne, WY 82001 Gus Lopez, City-County Health Unit, 315 W. 20th Street, Cheyenne, WY 82001

/X/ New			
// Renewal		Permit No	77-390RR
/_/ Modified			
	Daniala Mad	•	
		ical Center of Facility)	
Thris	permit hereby auth	orizes the anni	icant:
11112	permit hereby auch	orazeo ene uppi	
	c/o Robert A. H		Ac. 111
	(Last)	(First)	(Middle)
	P. O. Box 67	/Gb T	) O 7
		(Street or I	?.U. BOX)
	Pinedale	Sublette	Wyoming 82941
	(City)	(County)	(State)
to construct ins	tall, or modify a	Sontic Tank -	leach Field
	•		LCCCI I ICIC
facility located	in Section 34, T3	4N, R109W (Legal Descrip	ortion)
		(Hegai bescrip	
in the County of	Sublette		, in the State of
Wyoming. This pe	rmit shall be effec	tive for a peri	lod of 2 years
from the date of	issuance of this pe	rmit not to exc	eed five (5) years.
		•.	
•			
		Authorized b	ру:
			a de la companya de
William &	. Jala 2	Lober	V6 Sundin
Adminis			Director
Water Qualit	A ninisiou	wyoming pept	. of Environmental Quality
April 5,	1978		
Doto	of Tesuance		4

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION
Hathaway Office Building
Cheyenne, Wyoming 82002

PROJECT: Sublette County Memorial Hospital, SW4, Section 34, T34N, R109W, Prinedale Wyomang - Subjette County

ARCHITECT OR ENGINEER: Rio Verde Engineering

ATTN: Robert Harrower, P.E.

P. O. Box 67 - Pinedale, Wyoming, 82941

Dilliam J. Garla

WATER QUALITY DIVISION REFERENCE NUMBER: 77-390R ♥

REVIEWING ENGINEER: David W. Hill - William L. Garland, P.E.

DATE OF REVIEW: February 14, 1978

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

COMMENTS:

1). Please state the depth to the seasonal high groundwater in the leach field area.

2). Submit details of the proposed distribution boxes.



# Department of Environmental Quality Water Quality Division

HATHAWAY BUILDING

CHEYENNE, WYOMING 82002

**TELEPHONE 307 777-7781** 

October 18, 1977

Mr. Joseph R. Hicks P.O. Box 596 Pinedale, Wyoming 82941

Dear Mr. Hicks:

RE: Sublette County Memorial Hospital Sewage Disposal System 77-390

We have received the plans and specifications for the above project.

Your facility does not qualify as a single family small wastewater facility under our "Chapter III Rules and Regulations." The plans will not be reviewed until they are signed or sealed by an engineer registered in the State of Wyoming.

If any question comes up, please feel free to contact us.

Sincerely,

David W. Hill

Environmental Engineer Water Quality Division

Said W Hill

DWH/jo Enclosure

/ <u>X</u> /	New	ì	,	
//	Renewal		Permit No. 7	7-391M
//	Modified			
	1	own of Pinedale -	Sewer Improvements	
		(Name	of Facility)	
	This	permit hereby aut	horizes the applica	ant:
		Town of Pineda	le .	
		c/o Rio Verde P.O. Box 67	(First) Engineering	(Middle)
			(Street or P.O	Box)
	•	Pinedalė:	Sublette	Wyoming 82941
		(City)	(County)	(State)
		the Town o	24 inch Sewer line	ġ ". 
facili	ity located	in	(Legal Description	on)
in the	e County of	Sublette		, in the State of
Wyomir	ng. This pe	rmit shall be effe	ctive for a period	ofyears
from t	the date of	issuance of this p	ermit not to exceed	d five (5) years.
	,			
	·		Authorized by:	
1200	Dian l	Ouland	Loien	E. Sundin
V	Adminis Vater Qualit	1 \	Wyoming Dept.	Director of Environmental Quality
	•		_	
	October	12, 1977		
	Date	of Issuance		



# Department of Environmental Quality Water Quality Division

HATHAWAY BUILDING

CHEYENNE, WYOMING 82002

TELEPHONE 307 777-7781

November 28, 1977

Mr. Robert A. Harrower Rio Verde Engineering P.O. Box 67 Pinedale, Wyoming 82941

Dear Mr. Harrower:

Sewer Improvements, Pinedale, Wyoming

The final specifications and design drawings of the above referenced project have been received, in duplicate, by this Department.

Please be advised that a review has been made of these plans and specifications and the authorization to construct already approved in the past remains unchanged. The project is approved by this Department with the minor changes made on the submitted documents.

Yours truly,

Frank R. Harman, P.E. Environmental Engineer Water Quality Division

FRH/jo

/ <u>X</u> /	New	ž		
//	Renewal		Permit No	77-392M
//	Modified			
	City	y of Lander, Water & (Name o	Sewer Stream Cr of Facility)	cossing Relocation
	This	permit hereby author	rizes the applic	cant:
		City of Lander (Last)	Attention: C. (First)	E. Spurlock Jr., City Engin (Middle)
		183 South 4th St	reet	
	•		(Street or P.	O. Box)
		Lander	Fremont	Wyoming 82520
		(City)	(County)	(State)
		,		•
to cor	nstruct, ins	tall, or modify a _	Sanitary Sewer	System
fooil:	ity located	in the City of Land	ler	
racri-	ity located	<u> </u>	(Legal Descript:	ion)
in the	e County of	Fremont		_, in the State of
Wyomin	ng. This pe	rmit shall be effect	tive for a period	d of <u>2</u> years
		issuance of this per		•
			Authorized by	:
				<del>-</del> 1
	00° P	(1) 0	for the	226 Sundin
ولالا	V Xlominis	trator		Director
1	Water Qualit		Wyoming Dept.	of Environmental Quality
			-	
	0ctober	25, 1977	:	
	Date	of Issuance	<del></del>	

/ <u>X</u> /	New	ì		
//	Renewal		Permit No	77-393M
//	Modified			
	AT		ict - Alpine Well # e of Facility)	1 & Associated Improvements
	This	permit hereby au	thorizes the applic	ant:
		Alpine Water		
		(Last) c/o Peter M. P.O. Box 114	(First) Jorgensen 12	(Middle)
			(Street or P.O	. Box)
		Jackson		Wyoming 83001
		(City)	(County)	(State)
		eall, or modify a		rict Well #1 & Improvements
		linaala	_	•
in the	County of _	Lincoln		, in the State of
Wyomin	g. This per	mit shall be eff	ective for a period	of 2 years
from t	he date of i	ssuance of this	permit not to excee	d five (5) years.
			Authorized by:	
<u>(Q).</u> w	Administ ater Quality	1 \	Wyoming Dept.	Director of Environmental Quality
	Octobe	r 12, 1977		

# WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY DIVISION State Office Building Cheyenne, Wyoming 82002

PROJECT: Alpine Water District - Alpine Well #1 and Associated Improvements,

Lincoln County, Wyoming

ARCHITECT OR ENGINEER: Peter M. Jorgensen, Consulting Engineer, P.O. Box 1142,

Jackson, WY 83001

WATER QUALITY DIVISION REFERENCE NUMBER: 77-393M

REVIEWING ENGINEER: Frank R, Harman, P.E. - William L. Garland, P.E.

DATE OF REVIEW: October 12, 1977

ACTION: AUTHORIZED FOR CONSTRUCTION

COMMENTS:
For convenience of maintenance and access for repair the check valve flow meter and gate valve should be put in a single manhole adjacent to either the well or the main.

/ <u>X</u> /	New	•		
//	Renewal		Permit No.	7-394
//	Modified			
	Bsi	j Horn Coal Waste T		No. 003 <b>∛</b>
		(Name	of Facility)	
	This	permit hereby author	orizes the applicar	nt:
			•	
		Big Horn Coa	<del>-</del>	
		(Last)	(First)	(Middle)
		P.O. Box 724	(Street or P.O.	Port
		Charat dan		
	-	Sheridan (City)	Sheridan (County)	Wyoming 32801 (State)
		(GIEY)	(country)	(0000)
to cor	nstruct, inst	call, or modify a $\underline{\mathbb{S}}$	waste Treatment Fac	illity.
		Section 15 T		
raciti	ity located i	-11	(Legal Description	1)
in the	e County of	Sheridan		in the State of
Wvomir	ng. This per	rmit shall be effec	tive for a period o	of 2 years
irom t	the date of t	issuance of this pe	rmit not to exceed	live (5) years.
			Authorized by:	
( )	00ia - 8 (	Do Q	Lover	- E. Sundin
	Administ Water Quality	· 7 \		Director  E Environmental Quality
•				
	Novem	ber 3, 1977		
<del></del>	Date	of Issuance		

# WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY DIVISION State Office Building Cheyenne, Wyoming 82002

PROJECT: Big Horn Elementary School - Waste System

ARCHITECT OR ENGINEER: Johnson - Graham Association, 644 Grand Avenue,

Billings, Montana 59101

WATER QUALITY DIVISION REFERENCE NUMBER: 77-395

REVIEWING ENGINEER: Roy E. Prior, William L. Garland, P.E.

DATE OF REVIEW: 10-21-77

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

COMMENTS:

Drawings and specifications require the signature or seal of an engineer registered in the State of Wyoming.

Deliam J. Garland

- 2. Provide profile of the sewerline, septic tank and leach field.
- 3. Provide a cross section detail of the leach field.
- 4. Provide specifications for sewer pipe, backfill and distribution box.
- 5. The sewer pipe should be 6 inches in diameter.
- 6. Provide location of potable water wells and lines and streams in the area.
- 7. What is the depth to the groundwater?
- 8. This cannot be considered a final review.

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY DIVISION State Office Building Cheyenne, Wyoming 82002

PROJECT: Davis Addition, Water and Sewer Extensions, Riverton, WY, Fremont

Elmo G. Peterson, P.E. - Wind River Engineers, ARCHITECT OR ENGINEER: P.O. Box 1369, Riverton, WY 82501

WATER QUALITY DIVISION REFERENCE NUMBER: 396

REVIEWING ENGINEER:

David W. Hill, William L. Garland, P.E

DATE OF REVIEW: October 19, 1977

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

COMMENTS:

- Please have owner or owners designated representative fill out and submit two copies "Application for Permit to Construct, Install...."
- 2) A letter is needed from the City of Riverton stating that the City will provide sewage treatment for the subdivision and provide water at adequate pressure.
- We do not have a copy of the City of Riverton specifications in this office. Please provide us with a copy.
- Complete design data for ultimate flows and population are needed.
- The two temporary ends of lines cannot end in a plug. A temporary flushing hydrant or blow-off shall be used. The East 6 inch line should be looped if possible.
- 6) Will the 4 inch water line serve two houses or will it ultimately be connected to an existing or future water main? This line must be 6 inch or larger if it is to be looped.
- The use of fire hydrants on a line supplied by a four inch line concerns us. One of the following is needed:
  - Fire hydrant cannot be used unless all supply lines back to the water source are 6 inch or larger.
  - 2) Hydraulically justify that the four inch line can supply the hydrants with fire flow.

Davis Addition, Water and Sewer Extensions, Riverton, WY, Fremont Co.

77-396

- 8) Please indicate the size of sewer line that this subdivisions sewer flows in to.
- 9) Six inch sewers are not allowable as main lines. Use 8 inch and a manhole at the intersection and a manhole or cleanout at the East end.
- 10) Detailed specifications are needed for the two water-sewerline crossovers.

# WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY DIVISION State Office Building Cheyenne, Wyoming 82002

PROJECT: Davis Addition, Water and Sewer Extensions, Riverton, Wyoming,

Fremont County

ARCHITECT OR ENGINEER: Elmo G. Peterson, P.E. - Wind River Engineers, P.O. Box 1369,

Riverton, WY 82501

WATER QUALITY DIVISION REFERENCE NUMBER: 77-396R

REVIEWING ENGINEER: David W. Hill, William L. Garland, P.E.

DATE OF REVIEW: November 3, 1977

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

#### COMMENTS:

#### WATER LINES

- 1) A detailed drawing of the proposed blowoffs is needed.
- 2) Detailed drawings and/or specifications are needed for the fire hydrant (i.e. valving, drain pits, thrust blocking, etc.)
- 3) Please submit sizes and concrete strengths of the proposed thrust blocks.
- 4) Pressure testing shall take place in accordance to AWWA C600. Pressure testing shall last no shorter than 1 hour.
- 5) Leakage testing shall last for a period no shorter than two hours.

## WASTEWATER SYSTEM

- 6) Infiltration or exfiltration shall not exceed 200 gallons per inch of pipe diameter per mile per day. The specifications allow 250 gallons.
- 7) Leakage tests must be specified. This may include either low pressure air testing or water testing.
- 8) An alignment specification between manholes is needed.
- 9) Ductile iron pipe must meet applicable AWWA specifications. Please insert this in plans and specifications.
- 10) An eight inch line must be used if two or more residences are to be hooked into it. A manhole is needed at the intersection and a cleanout at the upper end, or individual four inch service lines for each residence may be used. Please change the plans to reflect the choice.

/ <u>X</u> / New			
// Renewal		Permit No. 77	-396RR
// Modified			
	Davis Subdivision. (Name	, Sewer & Water Lin of Facility)	es
This	permit hereby aut	horizes the applica	ent:
	Davis (Last)	Percy (First)	T (Middle)
	2203 West Mai	in Street (Street or P.O.	Box)
	Riverton (City)	Fremont (County)	Wyoming (State)
	tall, or modify a in Section 33, T1	Water and Sewer L LN, R4E (Legal Description	
in the County of	Fremont	-	, in the State of
		ctive for a period	of 2 years
from the date of	issuance of this p	ermit not to exceed	d five (5) years.
		Authorized by:	
6). Olan J.	Chila Q	Robert (	E Sundin
Adminis Water Qualit		Wyoming Dept.	Director of Environmental Quality
January 23,	1978 e of Issuance		

cc: Wind River Engineers, ATTN: Elmo Peterson, P.E., P. O. Box 1369, Riverton, Wyoming 82501

/ <u>X</u> /	New			•
//	Renewal		Permit No	77-397
//	Modified			
		Wilson Sept		
		(Name of	Facility)	
	This	permit hereby author	rizes the applic	eant:
		Wilson	Robert	()(:112.)
		(Last) c/o Husmans, Inc.	(First)	(Middle)
, i		P.O. Box 6127	(Street or P.C	). Box)
		Sheridan	Sheridan	Wyoming 82801
		(City)	(County)	(State)
		all, or modify a n Section 20, T55N		
in the	e County of _	Sheridan		, in the State of
		mit shall be effecti	ive for a period	l of <u>2</u> years
		ssuance of this perm		
TTOM	the date of I			
			Authorized by	:
				~ /
7001	no: P(	000	Local	6 janier
\ <u>\</u> \	Administ	rator	T. Dank	Director
•	Water Quality	Division	wyoming Dept.	of Environmental Quality
		13, 1977		
	Date	of Issuance		

			-			
/ <u>X</u> /	New	•				
//	Renewal		Permit No. 77	7-398MRR		
//	Modified					
	North Platte Water & Sewer District (Hilton Inn), <u>Sewer, Lift Station Construction &amp; Pump House Modification</u> (Name of Facility)					
	This p	ermit hereby auth	orizes the applica	nt:		
		North Platte 1	Water & Sewer Distr	rict		
à		(Last)	(First)	(Middle)		
		P. 0. Box 614	(Street or P.O.			
			•			
	•	Casper (City)	Natrona (County)	Wyoming 82601 (State)		
		(010)/	(Coding),	, ,		
to cor	nstruct, insta	11, or modify a _	Sewer, Lift Stat	ion & Water Pump House		
facili	ity located in	Section 4, T33N	, R79W			
			(Legal Descriptio	n)		
in the	e-County-of N	atrona		in the State of		
Wyomir	ng. This perm	it shall be effec	tive for a period	of 2years		
from t	the date of is	suance of this pe	rmit not to exceed	five (5) years.		
	-	•				
			Authorized_by:			
<u> </u>	Olian R.	lala S	Poor	- E. Lundin		
Ţ	Administr Water Quality		Wyoming Dept. o	Director  f Environmental Quality		
	•					

March 15, 1978

Date of Issuance
This permit does not supercede the requirements for obtaining a Septic Tank
Permit from Natrona County Health Department.
cc: Howard, Needles, Tammen & Bergendoff, P. O. Box 3478, Casper, Wyoming 82601

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION
Hathaway Office Building
Cheyenne, Wyoming 82002

PROJECT: North Platte Water & Sewer District (Hilton Inn), Sewer, Fig. Lift Station Construction and Pump House Mod Migation

ARCHITECT OR ENGINEER: HNTB, Inc., ATTN: Gray Wangelin

P. O. Box 3478, Intermountain Building, Casper, WY 82602

WATER QUALITY DIVISION REFERENCE NUMBER: 77-398MR

REVIEWING ENGINEER: Dan H. Kim - Don Armstyong, P.E.

DATE OF REVIEW: February 4, 1978

ACTION: NOT AUTHORIZED FOR CONSTRUCTION?

COMMENTS:

GENERAL

- 1). Disinfection of water system shall be performed in accordance with AWWA Standards C601-68. The application of chlorine shall be at a rate of no less than 50 mg/l with a residual at the end of 24 hours of no less than 25 mg/l.
- 2). Please provide detail drawings of type of bedding to be used.
- A letter of verification from the City should be provided, indicating that they are capable of handling added organic and/or hydraulic loads.

LIFT STATION

- 1). Is the top of the lift station above the highest known flood level?
- 2). What size of solids can the submersible pump handle? Unless the pumps are guaranteed not to clog they should be preceded by a rack accessible for maintenance from above.
- 3). Submersible pumps shall be capable of unsubmerged operation without damage or reduction of service capability or positive provisions shall be made to assure submergence, e.g. back up controls.
- 4). Emergency power supply or emergency overflow storage having a minimum of two hour detention capacity should be provided as directed in Chapter 30 of Ten State Standards for Sewage Works.
- 5). Ten State Standards (Addendum No. 5) require all control valves on the discharge line for each pump be placed in a convenient location outside the wet well.

PROJECT: North Platte Water & Sewer District (Hilton Inn), Sewer, Lift Station Construction and Pump House Modification

WATER QUALITY REFERENCE NUMBER: 77-398MR (CONT)

- 6). How much sewage flow is expected from the new Hilton Inn? Please provide design calculation for wet well (i.e. size, detention time, etc.).
- 7). Please specify the type of alarm to be used and show how it is connected.
- 8). This cannot be considered a final review.

# WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY DIVISION State Office Building Cheyenne, Wyoming 82002

PROJECT: Hilton Inn - Relocation of Sewerline, North Platte Water and Sewer

例istrict/

ARCHITECT OR ENGINEER: Howard, Needles, Tammen and Bergendoff, P.O. Box 3478,

Casper, Wyoming 82602

WATER QUALITY DIVISION REFERENCE NUMBER: 77-398M

REVIEWING ENGINEER: Dan H. Kim, William L. Garland, P.E.

DATE OF REVIEW: October 26, 1977

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

**COMMENTS:** 1) Enclosed is an application for a permit to construct, which should be completed and returned to our office.

- Exfiltration maximum is 200 gallons per inch of diameter per mile per day for any section of the system. This requirement should be included in the specifications.
- 3) Water and sewer line crossings are not per State Water Quality Chapter III Regulations.
- 4) Should provide specifications concerning excessive sidefill pressures and ovalation of the pipe. The maximum deflection allowed shall not exceed 5% of the pipes internal diameter.
- 5) Backfilling specifications should indicate that backfill material shall be free from rocks, hard clods and frozen material.
- 6) This cannot be considered a final review.

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION
Hathaway Office Building
Cheyenne, Wyoming 82002

PROJECT: Town of South Superior, Proposed Development in Blocks 6 & 9,

2nd Addition - Sweetwater County

ARCHITECT OR ENGINEER: David P. Miller, P.E., P. O. Box 422,

Rock Springs, Wyoming 82901

WATER QUALITY DIVISION REFERENCE NUMBER: 77-399MR

REVIEWING ENGINEER: Frank R. Harman, P.E. Frank R. Harman

DATE OF REVIEW: March 7, 1978

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

**COMMENTS:** 

MANHOLE

1). Provide a detailed drawing of a typical manhole proposed to be used in the project.

### TREATMENT ADEQUACY

Provide a letter from the Town of South Superior stating that when the
projected sewage project, which is being planned by the Town is completed,
it will be capable of taking and treating this development's sewage in
addition to the Town's sewage.

### WATER AND SEWER CROSSINGS

 Where water lines and sewer lines cross, they shall do so in accordance with the requirements of the Ten State Standards (copy attached). Indicate statement of compliance.



#### 29.2 Relation to Water Works Structures

While no general statement can be made to cover all conditions, it is generally recognized that sewers shall meet the requirements of the approving agency with respect to minimum distances from public water supply wells or other water supply sources and structures.

#### 29.3 Relation to Water Mains

#### 29.31 Horizontal Separation

Whenever possible, sewers should be laid at least 10 feet, horizontally, from any existing or proposed water main. Should local conditions prevent a lateral separation of 10 feet, a sewer may be laid closer than 10 feet to a water main if:

- a. It is laid in a separate trench.
- b. It is laid in the same trench with the water mains located at one side on a bench of undisturbed earth.
- c. In either case the elevation of the crown of the sewer is at least 18 inches below the invert of the water main.

### 29.32 Vertical Separation

Whenever sewers must cross under water mains, the sewer shall be laid at such an elevation that the top of the sewer is at least 18 inches below the bottom of the water main. When the elevation of the sewer cannot be buried to meet the above requirement, the water main shall be relocated to provide this separation or reconstructed with slip-on or mechanical-joint cast-iron pipe, asbestos-cement pressure pipe or prestressed concrete cylinder pipe for a distance of 10 feet on each side of the sewer. One full length of water main should be centered over the sewer so that both joints will be as far from the sewer as possible.

#### 29.33 Special Conditions

When it is impossible to obtain proper horizontal and vertical separation as stipulated above, the water main should be con strtucted of slip-on or mechanical-joint cast-iron pipe, asbestos-cement pressure pipe or prestressed concrete cylinder pipe and the sewer constructed of mechanical-joint cast-iron pipe and both services should be pressure tested to assure water-tightness.

# WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY DIVISION State Office Building Cheyenne, Wyoming 82002

PROJECT: Town of South Superior, Proposed Sewer Line and Lagoon in Blocks 6 & 7 - 2nd Addition, South Superior, WY

ARCHITECT OR ENGINEER: David P. Miller - P.O. Box 422, Rock Springs, WY 82901

WATER QUALITY DIVISION REFERENCE NUMBER: 77-399M

REVIEWING ENGINEER: Frank R. Harman, P.E. - William L. Garland, P.E.

DATE OF REVIEW: October 12, 1977

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

COMMENTS:

- Provide a detailed drawing of the outlet manhole structure from the lagoon.
- 2) Side slopes of the dikes shall be 3 horizontal to 1 vertical.

FRH/jo

cc: Thomas W. Bergman, 3025 Morgan Valley Drive, Morgan, Utah 84050